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REED SMITH LLP			EXAMINER	
3110 FAIRVIEW PARK DRIVE, SUITE 1400			KOTTER, KIP T	
FALLS CHURCH, VA 22042				
			ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/531,296

Applicant(s)

FIORAVANTIL, MORENO

Examiner

Kip Kotter

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 6-12 and 15-20 is/are pending in the application.
- 4a) Of the above claim(s) 6-9 and 15-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 10-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 April 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 14 April 2005.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election **with traverse** of claims 1-4 and 10-12 in the reply filed on July 24, 2007 is acknowledged. Claims 6-9 and 15-20 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species.

2. Applicant's arguments regarding the traversal of the Election of Species requirement have been fully considered but they are not persuasive.

In response to applicant's argument on page 5 of the Response to Restriction Requirement and Amendment that "the Examiner did not state that each the of embodiments classified into each individual species would be unobvious, and thus separately patentable over each other" and therefore the restriction requirement is not proper, note the following paragraph reproduced from page 3 of the Election of Species requirement:

The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the following reasons: **The species include patentably distinct spoke arrangements and number of spokes.**

In response to applicant's argument on page 6 of the Response to Restriction Requirement and Amendment that "the embodiments as illustrated in Figs. 1-3, 8 and 8a describe a single general inventive concept, and therefore, one species of a generic invention", note that Fig. 8 includes a patentably distinct spoke arrangement that differs from the embodiments found in Figs. 1-3 and Fig. 8a. Further, claim 1 is no longer generic for the embodiment of Fig. 8

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because the first spoke and second spoke of one radial element do not cross each other. The embodiment of Fig. 8a differs from the embodiments of Figs. 1-3 and Fig. 8 because it includes a patentably distinct hub structure and spoke arrangement.

Drawings

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "elements of said first distribution being offset by a second present angle β with respect to said first distribution" as set forth in claim 2 must be shown or the feature(s) canceled from the claim(s). It appears that the elements of said first distribution are offset by a second present angle β with respect to said *second* distribution as shown in Fig. 1. **No new matter should be entered.**

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will

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be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

4. The abstract of the disclosure is objected to because it contains legal phraseology that should be avoided as noted in the following paragraph. Correction is required. See MPEP § 608.01(b).

5. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

6. The disclosure is objected to because of the following informalities:

- In line 14 of page 2, the phrase "wheel are recently been provided" should be changed to – **wheels have been recently provided** – for grammatical clarity.
- In line 32 of page 3; line 4 and line 20 of page 6; line 7 and line 17 of page 7; and line 7 of page 8, a space should be inserted between the comma and "6".
- In line 19 of page 4, "engage" should be changed to – **engages** – and "holes" should be changed to – **hole** – for grammatical clarity.

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- In line 22 of page 4, a space should be inserted between “4” and “of”.
- In line 29 of page 4, a space should be inserted between the comma and “8”.
- In line 3 of page 5, a superfluous space should be deleted between “nipples” and the comma.
- In line 5 of page 5, a space should be inserted between the comma and “10”.
- In line 14 of page 5, the phrase “by couples of nipples” is unclear and should be corrected.
- In line 28 of page 5, a space should be inserted between the comma and “2”.

Appropriate correction is required.

7. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: The disclosure does not describe “elements of said first distribution being offset by a second present angle β with respect to said first distribution” as set forth in claim 1.

Claim Objections

8. Claim 10 is objected to because of the following informality: “engage” should be changed to – **engages** – for grammatical clarity. Appropriate correction is required.

Claim Rejections - 35 USC § 112

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 1-4 and 10-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 1 recites the broad recitation "Bicycle wheel", and the claim also recites "in particular for racing and mountain bicycles" which is the narrower statement of the range/limitation.

Also, there is insufficient antecedent basis for the limitations "first and second spoke" in claim 1.

Regarding claim 4, the phrase "a first and a second wire spoke" renders the claim indefinite because it is not clear whether "a first and a second wire spoke" refers to "first and second spoke" of claim 1, or if "a first and a second wire spoke" refers to a distinct set of spokes.

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

12. Claims 1-4 and 11-12, as best understood by Examiner, are rejected under 35 U.S.C. 102(b) as being anticipated by Ho (U.S. Patent No. 4529253).

Ho discloses a bicycle wheel comprising: a hub **3**, **3'** and a rim **2** connected with by means of a plurality of radial elements (each radial element includes a pair of adjacent spokes from one side of the hub), wherein said radial elements are grouped in a first distribution (spokes **1'** that extend from wheel hub **3'**), in which said elements are arranged on one side of the wheel, and a second distribution (spokes **1** that extend from wheel hub **3**), in which said elements are arranged on the other side of the wheel, said first and second distribution connecting said rim to respective ends of said hub as shown in Fig. 7, the radial elements of said first distribution being connected to said rim in respective fixing seats which are disposed alternate to the fixing seats of the radial elements of said second distribution along said rim, and wherein first and second spoke of one radial element cross each other as shown in Fig. 7, wherein the radial elements of said first distribution and the radial elements of said second distribution are mutually angularly equidistant on each side of a wheel, by a first preset angle α , and wherein the elements of said first distribution being offset by a second preset angle β with respect to said second distribution wherein said second preset angle β is half of said first preset angle α as best shown in Fig. 3 and

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Fig. 7, wherein each of said radial elements is constituted by a first and a second wire spoke (adjacent spokes 1 as shown in Fig. 7) having respective terminal proximal portions connected to said hub and respective terminal distal portions connected to said rim in respective pairs of said fixing seats.

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ho in view of Gerrit et al. (U.S. Patent No. 6557946 B1).

Ho fails to disclose the fixing seats being constituted by nipples rigidly coupled to the rim and having an internal thread in which engages the spokes.

Gerrit et al. teaches spoke nipples 1 that can be rigidly coupled to bicycle rims and have internal threads 7 to engage spokes.

From this teaching, it would have been obvious to a person having ordinary skill in the art to have substituted a spoke nipple arrangement, such as taught by Gerrit et al., for the bent end hook arrangement of Ho as an art-recognized equivalent for securing spokes to the wheel rim.

Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The references show other spoke arrangements.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kip Kotter whose telephone number is (571) 272-7953. The examiner can normally be reached on 9:00-4:00pm est.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Samuel J. Morano can be reached on (571) 272-6684. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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